

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,299	10/25/2001	Steve Horvath	18360-233642	8229
826 ALSTON & BII	7590 03/13/2007 RDJIP	EXAMINER		
BANK OF AMI	ERICA PLAZA	SWARTHOUT, BRENT		
101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			ART UNIT	PAPER NUMBER
			2612	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS 03/13/2007 PAPER		PER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		ור			
	Application No.	Applicant(s)			
	10/033,299	HORVATH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Brent A. Swarthout	2612			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	ith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a ron. eriod will apply and will expire SIX (6) MON tatute, cause the application to become AB	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status	·				
1) Responsive to communication(s) filed on _					
	. · · · · · · · · · · · · · · · · · · ·				
3) Since this application is in condition for allo	,				
closed in accordance with the practice und	ler <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.			
Disposition of Claims	•				
4) Claim(s) 1-78 is/are pending in the applicat	tion.	•			
4a) Of the above claim(s) is/are with					
5)⊠ Claim(s) <u>71-74</u> is/are allowed.					
6) Claim(s) <u>1-7,9-13,15-24,26-37,39-48,50-59</u>	9,61-68,70 and 75-78 is/are re	jected.			
7)⊠ Claim(s) <u>8,14,25,38,49,60 and 69</u> is/are ob	ected to.	-			
8) Claim(s) are subject to restriction ar	nd/or election requirement.	¥			
Application Papers					
9)☐ The specification is objected to by the Exam	niner.				
10) The drawing(s) filed on is/are: a)		by the Examiner.			
Applicant may not request that any objection to					
Replacement drawing sheet(s) including the cor					
11)☐ The oath or declaration is objected to by the	e Examiner. Note the attached	d Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C. §	119(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:		•			
1. Certified copies of the priority docum					
2. Certified copies of the priority docum	· · · · · · · · · · · · · · · · · · ·	· ·			
3. Copies of the certified copies of the p	•	received in this National Stage			
application from the International But * See the attached detailed Office action for a	, , , , , , , , , , , , , , , , , , , ,	received.			
dee the attached detailed Office action for a	iist of the certified copies flot	received.			
Attachment(s)	□	(
1) 🔯 Notice of References Cited (PTO-892) 2) 🔲 Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∟∫ Interview S Paper No(s	summary (PTO-413) s)/Mail Date			
B) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of In	nformal Patent Application			
Paper No(s)/Mail Date <u>2-15-02,11-4-02,1-26-04</u> .	6) Other:				

Art Unit: 2612

1. The disclosure is objected to because of the following informalities: in claim 17, line 13, the line improperly ends in a period, since claims should be in single sentence format.

Appropriate correction is required.

2. Claims 7,15,17,24,28,30,37,39,41,48,50,52,59,61,68 and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the cited claims, the language "own ship landing" is indefinite as to how it is determined when a ship is landing, or by what means or steps such determination is accomplished.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,6,9-13,16-21,23,26,27,29-34,36,39-45,47,50-56,58,61-65,67 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al. in view of Gralnick.

Gilbert discloses a system for displaying aeronautical information comprising processing means (Fig. 2), display screen (Fig. 6), the display only displaying target aircraft above a minimum altitude threshold with respect to an own aircraft and below a maximum altitude threshold with respect to an own aircraft, and withholding display of

Art Unit: 2612

targets above or below such thresholds (col. 9, lines 20-30), except for specifically stating that a CPU receives and processes such target information for display determination.

However, Gralnick discloses a well-known aircraft target display system wherein detected target information with respect to an own aircraft are processed and directed to a display through a TCAS computer (Fig. 3).

It would have been obvious to use computer processing means as suggested by Gralnick to display desired targets with respect to an own aircraft in conjunction with a system as disclosed by Gilbert, in order that a large number of targets could have been processed and monitored in an efficient manner at low cost.

Regarding claim 2, Gilbert teaches desirability of replacing altitude thresholds with new ones (col. 9, lines 20-30; Fig. 5).

Regarding claim 3, Gilbert teaches using maximum and minimum altitude threshold of 2000 feet (col. 9, lines 20-30).

Regarding claim 10, if own ship was on the ground, the 2000 foot threshold would have been with respect to the ground.

Regarding claim 11, since Gralnick teaches desirability of displaying altitude values of targets on a display (Fig. 2a), choosing to display altitude thresholds would have been obvious, in order that a pilot could have known what a threshold was without having to look away from a primary flight instrument to make such a determination, thus providing greater safety.

Art Unit: 2612

Regarding claim 13, filtering mode would have corresponded to what altitude threshold was selected.

Regarding claim 16, targets would have been withheld as previously described for both a first altitude threshold mode, such as 1000 feet, and also for a second selected altitude threshold mode of 2000 feet.

Regarding claim 17, switching to a landing situation would have still allowed for withholding of targets as previously described for first and second selected altitude thresholds.

4. Claims 5,22,35,46,57 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al. in view of Gralnick and Harrah et al.

Harrah discloses desirability of only displaying targets to an aircraft that are within a desired altitude band (col. 7, lines 24-42), wherein the altitude band is not adjustable by a user.

It would have been obvious to use a non-adjustable default altitude threshold as suggested by Harrah in conjunction with a target display system as disclosed by the combined teachings of Gilbert and Gralnick, in order to allow an aircraft system to easily return to a basic threshold value after other phases of flight, so a pilot wouldn't have to constantly reset the system manually.

5. Claims 7,15, 24,28,37,48,59,68 and 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al. in view of Gralnick and Funatsu.

Art Unit: 2612

Funatsu teaches desirability in an aircraft collision avoidance display system of reducing nuisance alerts when aircraft is landing (col. 5, lines 24-30), by resetting threshold altitudes to ignore targets at an airport.

It would have been obvious to reset altitude thresholds to a default value when landing as suggested by Funatsu in a collision avoidance display system as disclosed by Gilbert and Gralnick, in order to avoid nuisance alerts due to targets on the ground.

- 6. Claims 8,14,25,38,49,60 and 69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
 - 7. Claims 71-74 are allowed.
- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stocker, Clark, Horvath and Minter disclose aircraft target detection systems.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent A. Swarthout whose telephone number is 571-272-2979. The examiner can normally be reached on M-Th from 6:00 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2612

Page 6

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent A Swarthout Primary Examiner Art Unit 2612

> ERENT A. SWARTHOUT PRIMARY EXAMINER